

## REMARKS

In the Office Action of May 13, 2008, the rejection of claims 7-9 under 35 U.S.C. 112, first paragraph, was maintained.

With the present amendments claim 7, the independent claim, is directed to the isolated, cell wall associated, 22.5 kD *Streptococcus uberis* protein having the amino acid sequence of SEQ ID NO:2 or an immunogenic fragment thereof having a length of at least 33 amino acids. With this amendment it is believed that the rejection under 35 U.S.C. 112, first paragraph, is overcome.

Claims 7-9 stand rejected under 35 U.S.C. 102(b) for anticipation by Leigh et al.

The rejection over Leigh et al is respectfully traversed.

The Examiner commented that the argument previously made, that the claimed protein is isolated from a cell wall using an enzyme, which distinguishes it from the proteins disclosed by Leigh et al, was not recited in the rejected claims. With the present amendments the claimed protein is recited as an isolated, cell wall associated, 22.5 kD protein and, specifically, the protein having the sequence depicted in SEQ ID NO: 2. Accordingly, the claim defines a protein that would not be found in the bands provided by Leigh et al, as Leigh et al isolates the protein from supernatant after centrifugation, and does not first digest the cellular material using a detergent or an enzyme. Accordingly, the cellular material, including Applicants' cell wall associated protein, would have been separated by centrifugation and removed prior to recovery according to the method of Leigh et al.

In paragraph 2.2 on page 852, Leigh et al describe the preparation of their antigen. Centrifugation and filtration were performed without detergents or enzymes that would degrade cellular material and release cell wall associated proteins, such as the protein presently claimed. Only soluble proteins in the supernatant are recovered and then precipitated by Leigh et al. Accordingly, the band in Figure 1 of Leigh et al showing a protein in the 20 kDa range could not be the cell associated protein claimed by Applicants.

It is respectfully submitted that the Leigh et al reference neither teaches nor suggests the isolation of any cell wall associated protein, and particularly not the 22.5 kD *Streptococcus uberis* protein of the present invention. Accordingly, it is believed that the present amendments remove all objections and rejections and place claims 7, 9 and 10, all claims presently in the application, in condition for allowance. Favorable action is solicited.

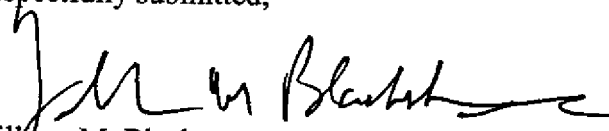
Pursuant to 37 C.F.R. § 1.116, Applicants further submit that the amendments presented herein are made to cancel claims and comply with requirements of form set forth in the previous Office action and present rejected claims in better form for consideration on appeal.

Applicants submit again another copy of the Substitute Sequence Listing and replacement CRF (Text Format), as well as the Checker 4.2.2 Verification Summary Report showing no errors. Should there remain any technical flaws that we would not detect, the Examiner is requested to specifically identify them.

Should the Examiner believe that a conference would be helpful in advancing the prosecution of this application, Examiner is invited to telephone Applicant's attorney at the number below.

Applicants do not believe that any other fee is due in connection with this filing. If, however, Applicants do owe any such fee(s), the Commissioner is hereby authorized to charge the fee(s) to Deposit Account No. 02-2334. In addition, if there is ever any other fee deficiency or overpayment under 37 C.F.R. §1.16 or 1.17 in connection with this patent application, the Commissioner is hereby authorized to charge such deficiency or overpayment to Deposit Account No. 02-2334.

Respectfully submitted,



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Response to Office Action of May 13, 2008

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Enclosures

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VERIFICATION SUMMARY REPORT

DATE:

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PATENT APPLICATION

TIME:

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Patent Applications\2002.013 US\2008 Patent Papers\Filing February 7,  
2008\SubstituteSequenceListing.txt

GENERAL INFORMATION SECTION

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3,<110> Intervet International B.V.  
4, Nuijten, Petrus J.  
5, Hensen, Selma M.  
7,<120> Streptococcus Uberis Protein, Nucleic Acid Sequence  
Encoding the  
8, same and its use a Mastitis Vaccine  
10,<130> 2002.013 US  
12,<140> 10/524198  
13,<141> 2005-02-10  
15,<150> EP 02078325.4  
16,<151> 2002-08-12  
18,<150> PCT/EP2003/008704  
19,<151> 2003-08-06  
21,<160> 6  
23,<170> PatentIn version 3.3

ERRORED LINES SECTION

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STATISTICS SUMMARY

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Application Serial Number: 10/524198  
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Application Class:  
Application File Date: 2005-02-10  
Art Unit:  
Software Application: PatentIN3.3  
Total Number of Sequences: 6  
Total Nucleotides: 973  
Total Amino Acids: 253  
Number of Errors: 0  
Number of Warnings: 0  
Number of Corrections: 0